

## Improving domestic financing for noncommunicable diseases and mental health care

### Technical background paper #4:

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## Summary

This paper explores a major topic in noncommunicable disease (NCD) and mental health financing: the role of domestic healthcare finance systems. The starting point for this paper is an acknowledgement that there is a need for greater investment in healthcare finance reform in general, which has knock-on benefits for NCD and mental health-specific interventions. Still, there are several entry points for targeted spending on these conditions, including public health activities on health promotion and prevention, and programs that enhance the implementation of NCD and mental health services. We present a series of country case studies that illustrate common challenges and opportunities related to financing for these conditions and highlight the role that multisectoral coalitions have played in successfully driving through health reforms related to NCDs and mental health. We review the role of priority-setting measures in helping guide financing for these conditions, and we show how strategic purchasing systems can be reformed to incentivize high-quality chronic disease management. Failure to invest in modern, digital health information systems is a major impediment to progress on financing for these chronic conditions. We conclude the paper with reflections on how to sustain effective coverage for NCD and mental health conditions in future decades that will be marked by accelerating epidemiological and demographic change.

## Key messages

- Many countries are struggling to achieve universal coverage of essential services for NCDs and mental health. Shortfalls in domestic financing are a major part of the problem, and far too many are exposed to excess financial risks. We acknowledge that general health financing reforms, including greater appropriation to the health budget, strengthening of public financial management systems, and so on are critical to addressing this problem, though they are not specific to NCDs and mental health.
- Still, there are several entry points for NCD- and mental health -specific spending to increase and to be targeted towards prevention and enhanced implementation of interventions included in health benefits packages. We propose a framework for identifying these entry points. The relative importance of each entry point will naturally vary by disease and country.

- We conducted a series of country case studies to identify common challenges and success stories and to validate our framework. We found that political (rhetorical) commitment and policy commitment to NCDs and mental health was necessary but not sufficient to increasing financing available for these conditions and/or improving the efficiency of existing financing. Countries that have been successful in resourcing NCD and mental health programs successfully engaged stakeholders outside the ministry of health, including ministries of finance, legislatures, civil society organizations, academics, professional societies, and in some cases industry.
- Health benefits packages have received a lot of attention in recent years. However, including NCD and mental health interventions in a package does not automatically lead to improved coverage and reduced financial hardship. Purchasing systems need to be designed to allow chronic disease interventions to translate seamlessly into increased inputs and outputs. Provider payment systems also need to be re-designed to incentivize high-quality chronic disease care and integration and coordination across episodes of care (e.g., inpatient vs. outpatient). Thus, these conditions can provide a useful lens for evaluating potential financing reforms against the growing need for complex, longitudinal care. We call these “NCD- and mental health-wise financing systems.” Moving towards NCD- and mental health-wise financing systems will require countries to invest in modernization and digitization of health information systems.

## Introduction

Noncommunicable diseases (NCDs) and mental health conditions represent the plurality of disease burden worldwide and in most countries.<sup>1</sup> Success in tackling communicable, maternal, perinatal, and nutritional diseases and excess fertility is leading to rapid epidemiological and demographic transitions that are pressuring health systems. Population demand for NCD and mental health care is outpacing increases in public spending on these conditions, leading to higher out-of-pocket costs and financial risks.<sup>2</sup> Multimorbidity, rapid population aging and increased exposure to NCD and mental health risk factors are the backdrop for this increase in demand.<sup>3</sup> Further, at least half of individuals with chronic health conditions have more than one co-occurring condition (i.e., multimorbidity), meaning that current models of primary healthcare need to pivot towards high-quality, complex chronic disease management.<sup>4</sup>

While much has been said about the need to invest more money in health overall, and several international organizations are supporting initiatives to improve domestic health financing in general, relatively little attention has been paid to specific NCD and mental health issues. Two types of change are needed. First, many countries are under-spending on essential NCD and mental health interventions, so additional resources are needed to support scale-up of these interventions. Second, existing spending is inefficient; for example, hypertension management is being done at hospitals rather than primary healthcare facilities. Lack of a NCD and mental health specific lens on health financing may lead ministries of health to miss opportunities relating to these conditions and maximize the impact of financing reforms.

In this paper, we take a close look at NCD- and mental health -specific issues within the broader domestic financing landscape. We review experiences from several countries, looking for common challenges and opportunities for improvement. We acknowledge that there is only one health financing system, and it should not be organized around specific diseases. Practically, though, allocation of resources to different disease areas and interventions is the result of many choices at different levels of the health system, including at facilities. By taking a disease-specific perspective, analysis can identify the specific financing issues related to those conditions and their interventions that require attention in financing reforms.

There are three important reasons why NCDs and mental health can illuminate financing discussions. First, these conditions are characterized by chronicity and correlation, i.e., multi-morbidity. In terms of financial protection, these features imply that under an out-of-pocket payment regime, patients will be exposed with an accumulation of financial risks over time (see technical background paper #5). Second, the interventions are heterogeneous and illustrate the range of challenges in production. Interventions like cardiac surgery are capital-intensive and use a specialized workforce and require a different way of thinking about, e.g., provider payment than treatment of episodic depression in primary healthcare—or community-based treatment of communicable diseases, for that matter. Third, there are significant distortions within existing systems, and allocation of resources is not fully under the control of national health stakeholders. For instance, some global health initiatives require governments to co-fund their interventions. This may imply that other national health priorities like NCDs and mental health are crowded out, including at the level of domestic budget.

This paper thus argues for “NCD- and mental health -wise” financing systems, i.e., health financing systems aware of the unique properties of interventions for chronic NCD and mental health conditions, which are likely to consume a greater share of health needs in coming decades. We show how this framing has implications for agenda-setting, health benefits package design, and strategic purchasing, among other activities. In illustrating the shortfalls in NCD and mental health funding, we are making the case for increased general funding (e.g., for primary healthcare systems), which has a knock-on effect for NCD and mental health funding, rather than advocating for verticalization of funding. We are also seeking to identify levers for action for countries that want to prioritize NCD and mental health conditions within their health strategies and, as part of this, increase and/or improve NCD- and mental health -specific spending. However, this paper does not attempt to address all health system barriers to NCDs and mental health, including service delivery issues, though it touches on these when relevant (e.g., via provider payment reform).

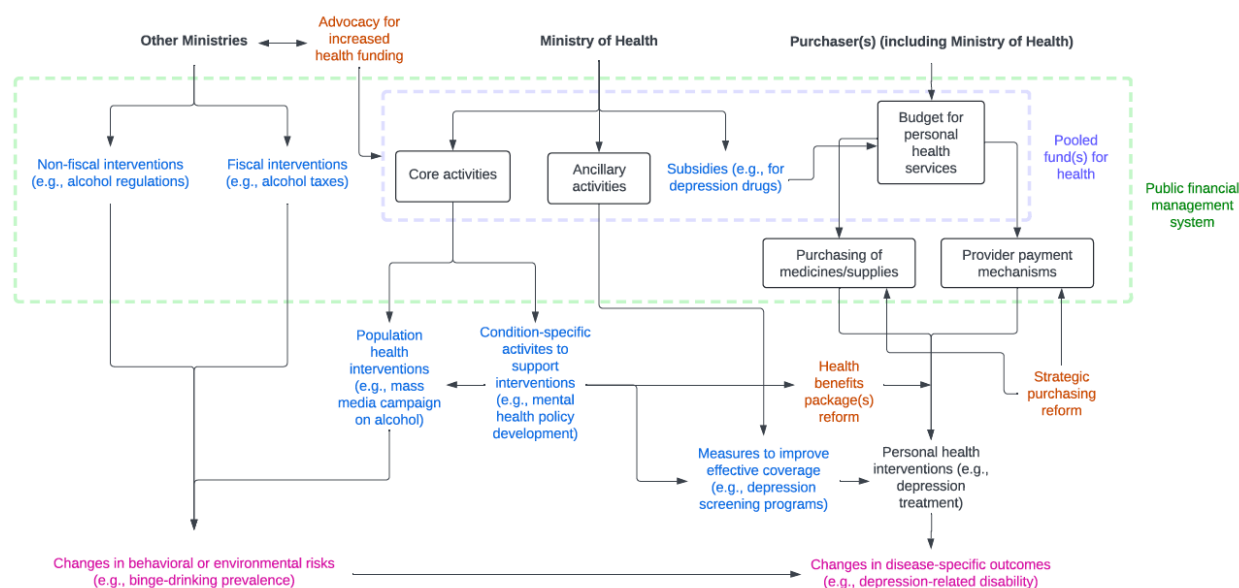
## **Section 1: What do we mean by increasing funding for NCDs and mental health?**

The first Global dialogue on financing NCDs called for greater investment in health systems in general (as well as increased development assistance) to make progress on NCD financing. In the upcoming International financing dialogue, which now includes mental health alongside NCDs, the focus will be on

identifying financing pathways for improving implementation essential NCD and mental health interventions. The key financing components of improved implementation include: (i) clearly defining entitlements through an explicit health benefits package, (ii) improving the efficiency of purchasing, and (iii) increasing the volume and quality of services purchased in line with national policies and strategies for scaling up these interventions. The combination of these elements ensures more effective entitlements.

Figure 1 provides a framework that we developed for this paper to identify the different policy actions that can lead improved and/or increased financing for essential NCD and mental health interventions. In blue are “targets” of disease-specific funding, i.e., things that can receive *specific* dedicated resources within the budget to achieve improvements in NCD and mental health risk factors and outcomes (shown in magenta). (Of course, fiscal interventions also generate funding for the government [see separate background paper], but for the purpose of this framework they are interventions.) Three additional actions, shown in orange, can potentially increase the available resources for NCDs and mental health and/or channel them towards effective interventions. Though they are not specific to NCDs and mental health, they benefit from taking an NCD/mental health perspective. Finally, the area of the framework shown in green lies within the public financial management (PFM) system; general initiatives to improve PFM would have a positive impact financing of all health services, including but not limited to NCD and mental health services. PFM reform is outside the scope of this International financing dialogue and is the responsibility of planning and financing officials across the government, rather than officials responsible for NCD and mental health programmes. However, we acknowledge that PFM reform is critical.

**Figure 1:** Framework for identifying activities that could lead to increases or improvements in financing for NCD and mental health interventions



## Section 2: Political commitment, financial commitment, and financing policies for NCD and mental health programmes – a review of country experiences

### *Overview of methods*

For this background paper, we conducted a desk review of NCD and mental health financing policies and their implementation in Ghana, Colombia, Ethiopia, Pakistan, and Samoa. We also conducted interviews with policy stakeholders in Colombia, Ethiopia and Ghana to contextualize our review. The Methods Annex [to be drafted in later April when more countries are added; anticipate 16 countries in total] summarizes the methods and provides a long-form writeup of the results for each country. Key findings are summarized here.

### *Findings from Ghana*

The study in Ghana confirmed that increasing domestic financing to NCD and mental health is a long policy process, even in countries where the disease burden is increasing and the health financing and delivery systems are in place. In Ghana, NCD and mental health are not seen yet as top priority issues within the broader society. The nature of NCD and their risk factors are often not well-known with limited awareness of NCDs and mental health and associated risk factors resulting in late presentations or when the disease is in an advanced stage of progression. Mental health problems are still stigmatized, and healthcare facilities are not necessarily the first place where households seek help as they often resort to traditionalists, spiritualists, faith healers, etc. This societal reality certainly weighs on the choices made by the government, especially the budgetary ones. Giving higher priority to NCD and mental health is also constrained by the general macroeconomic situation, including the obligation upon the government to service interests on domestic and foreign debts.

Possibly because of tight fiscal constraints, over the last several years the national health insurance scheme has not received its earmarked tax revenue in full, and delays in the release of funds remain. A recent Act of Parliament (Act 947) now directs that all allocations of statutory funds (specific funds set aside by law for purposes such as the National Health Insurance Fund) should not exceed 25%. If more financial resources were allocated to NCD and mental health, Ghana's health system would be able to respond more rapidly. Several enablers are already present, including: (i) a strong health system organized around agencies and delivery networks; (ii) a coherent health financing system (including a national health insurance authority able to operate as a strategic purchaser, at least for curative care); (iii) a societal commitment to human development which materialized into a rich ecosystem of paramedical and medical education and research institutions; (iv) a vibrant democracy rich in civil society organizations and scholars active in the NCD and mental health service delivery and policy arena. This has allowed, among other

things, recent policy developments such as the introduction in 2023 of some health taxes<sup>5</sup> and the forthcoming integration of four mental health conditions into the national health insurance benefit package process.

### *Findings from Colombia*

Our review and interviews identified a strong commitment to action on NCD and mental health conditions in Colombia. For example, the current government, building on previous policies, recently introduced a “junk food law” that includes, among other things, a novel tax on ultra-processed foods. Specific mental health and cancer policies have also been developed in recent years. The healthcare financing system has several strengths, including (i) high coverage of social health insurance (>95% population), (ii) very low out-of-pocket costs (<15%), and (iii) a generous HBP that covers most essential NCD care. This represents considerable progress since the precursor to the current financing system was instituted in 1993 (and population coverage was <20%). The country also has a risk equalization fund for some high-cost conditions including chronic kidney disease and diabetes. Finally, the constitution enumerates a legal right to health that has been used successfully to sue for access to NCD medications, among others.

There are two main challenges with the country’s current financing system. First, there are considerable disparities between the two major types of insurance schemes, contributory (financed through payroll taxes) and subsidized (financed through general taxes). Subsidized schemes (covering ~50% of the population) must give preference in their contracts to public providers (~20% of all providers), limiting access. Additionally, subnational units of the ministry of health report limited funding available for local public health activities, including prevention and health promotion efforts. MENTAL HEALTH appears to be less well-financed than NCDs, with relatively fewer interventions available in the health benefits package. Finally, while “everything is covered” in principle, implementation of essential NCD and mental health interventions remains poor, with low effective coverage (e.g., <1/3 of persons with hypertension having their blood pressure under control) in many parts of the country,<sup>6</sup> especially outside major cities. For NCD and mental health interventions to be better implemented, a greater share of the population would need to be effectively covered than is currently effectively covered. Contributions would probably need to increase to allow the insurance schemes to pay for this increase in the number of people effectively covered.

### *Findings from Ethiopia*

Although the disease burden profile of Ethiopia is still skewed towards communicable, maternal, perinatal, and nutritional disease, and the health system relies heavily on external financial support, we found evidence of policy commitment to NCD and mental health. The country underwent an Essential Health Service Package revision in 2019, with numerous NCD and mental health interventions considered, and some included (with even more “partially” included, under cost-sharing arrangements).<sup>7</sup> The reason for this success is probably a strong general commitment to evidence-based planning and priority setting,

which facilitates NCD- and mental health -specific considerations within HBP, essential medicines list, etc. processes.

The main challenge in Ethiopia appears to be around implementing the national NCD and mental health strategies. Overall resource levels, remaining systemic gaps within the service delivery and healthcare financing systems and the devolution model are constraints. In many places, the health service delivery is still constrained by the lack of qualified human resources. Government-subsidized community-based health insurance systems are emerging as a cornerstone of the country strategy towards UHC, but they only cover households from the informal sector and the benefits are constrained by the services available in close-by public facilities. Mental health appears to be even less sufficiently resourced than NCDs, with a mental health workforce still to be built. Finally, compared to other countries, the social dialogue dimension of NCD and mental health financing has still to be developed. Most of the action to date has been initiated by the State, with limited engagement of patients and civil society (mainly professional societies), which potentially creates a perception of limited public demand.

### *Findings from Pakistan*

Like Ethiopia, Pakistan recently underwent several health policy changes including a revision of the national HBP. We found evidence of increasing political interest and commitment to tackling these conditions, including a national action plan for NCDs and inclusion of several NCD and mental health interventions in the latest HBP. Several champions have emerged within and outside the government to advocate for NCDs and especially for implementation of intersectoral policies. Some subnational governments, e.g., Islamabad, have committed to increasing public-sector health expenditure to implement their plans, which is expected to bring more funding for NCD and mental health interventions.

Although progress is being made, funding for health remains low in absolute terms. NCD spending is relatively low compared to disease burden, and mental health appears to be even less funded (and associated with some stigma, hindering policy action). A major challenge with the health financing system nationwide is fragmentation: general taxation is the predominant financing mechanism, but out-of-pocket costs are stubbornly high, and social health insurance pilots and disease-specific financing (e.g., for cardiovascular care) have emerged to fill in the gaps.

### *Findings from Samoa*

NCDs and mental health are a major concern for the ministry of health in Samoa. There is strong political commitment to NCD prevention and management programmes, and these conditions account for a plurality of health spending. General taxation is the predominant source of domestic funding, though the country receives considerable external aid, including from China and Australia and from development banks. Some of this is channeled towards NCDs, even if indirectly. For example, development partners have supported capital investments to build new hospitals and clinics. As another example, a World Bank supported project called Programme for Results supports the implementation of the NCD Policy and Action



Plan, which includes community-based disease management, health promotion, and the taxation of unhealthy foods.

Weaknesses in health financing in Samoa seem to stem from low resource levels overall (like Ethiopia and Pakistan) and inefficiencies in spending. Incentives in recent years have shifted towards doctor- and hospital-centered care, especially in the capital city. The government is currently attempting to revitalize primary healthcare to reach more individuals in rural areas. Still, trust in local clinics is low, and many patients bypass the primary healthcare system to receive care in hospitals. Policy documents also note that some of the inefficiencies in the system are due to suboptimal financial management systems and monitoring and evaluation.

### *Comparisons across countries*

Political commitment. We examined several dimensions of political commitment including Ministry of Health processes for developing, revising, and adopting NCD and mental health -related policies; the prominence of stated support for NCD and mental health responses outside of the health sector; and the presence and intensity of social activism and mobilization around NCDs and mental health. These dimensions are not exhaustive, but can be thought of as signals for institutional, expressed, and normative commitment to NCD and mental health in health and cross-sector policy.<sup>8</sup>

Some key findings:

- Policy documentation, typically in the form of NCD and mental health -specific strategies are the most widespread indicator of political commitment, but existence of these policy documents is not generally predictive of other aspects of political commitment (e.g., there is not clear evidence they are effectively used to motivate cross-sector collaboration). The relationship between official policy documentation and ability to finance these policies is weak. The establishment of these strategies is unrelated to a country's income level, suggesting that these commitments are the easiest to demonstrate.
- NCD and mental health suffer significantly from a systematic lack of engagement with and recognition by non-health sector ministries, organizations, and actors. This is due in part to ongoing neglect to invest in the unique expertise and human resource capacity needed to do this work at the country level. Where there have been cross-sector successes social mobilization is a catalyst for implementation, particularly in countries that have an existing culture of responsiveness to citizenry.
- Industry and the private sector are substantially under-engaged, despite the widespread recognition of their role as enablers and/or opponents of NCD programmes (less for mental health). Cross-country lessons on effective engagement strategies could produce substantial gains here.

Financial commitment. Assessing domestic financial (or budgetary) commitment for NCD and mental health presents significant challenges. The heterogeneity of country needs and variations in financing structures combined with a widespread lack of capacity and attention to publicly available financial reporting make comparing the magnitude of spending on NCD and mental health across countries difficult. While tempting to assume otherwise, the path from political commitment to financial commitment is not unidirectional, and an increase in domestic political commitment does not determine or guarantee and increase in the financial commitment. From a general financing perspective, it is unclear whether the financing system is set up to enable pooled funds to be linked to priority interventions, as opposed to merely funding inputs. Nevertheless, a clear indication of political commitment is necessary for mobilizing and allocating resources specific to NCDs and mental health.

Some key findings:

- Even in countries with well-resourced, robust NCD and mental health responses, there is a lack of disaggregated data on NCD and mental health in financial data reporting systems. This is one of the most significant impediments to planning, effective policy revision, policy implementation, and advocacy for NCD and mental health.
- Most of the case study countries had out-of-pocket cost shares for NCD and mental health that were much higher than WHO-recommended levels (<20%); for LICs and LMICs it is not unusual to see out-of-pocket costs exceeding 50% of total costs despite “free care” policies. Further, OOP cost shares are disproportionately high for NCD and mental health conditions, even for interventions that are included in HBPs. For example, rates of catastrophic spending on hypertension and diabetes in Pakistan were twice the rates for healthcare in general.
- Evidence of financial commitment is not just increasing budgets, but also concerted efforts in using existing resources more efficiently to expand the resources available for NCD and mental health. Strong demand from countries for more work here and multiple success stories shared (e.g., workforce skill expansion to facilitate mental health care in primary healthcare). Strategies for tracking/assessing the expected impact of these are lacking.
- In the case study countries, no significant commitment from national private actors (e.g., foundations) to NCD or mental health was reported or found\* and arguably confirms that public domestic funding is the only real solution.

### **Section 3: Prioritizing NCD and mental health interventions for increased funding**

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\* We need more research on what health conditions are supported by influential, well-resources groups in LICs and MICs. The low traction on mental health might be related to the stigmatization of these conditions. The reason why NCDs do not garner support (perhaps with cancer being the exception) could be related to their risk factors, which are driven by commercial determinants, including the interests of industry.

## *Strategic entry points for NCD and mental health interventions in HBP processes*

The 2020–2021 WHO Health Benefit Package Global Survey showed that HBPs offer limited coverage for NCDs and mental health, despite most of the health burden caused by NCDs (<https://www.who.int/data/stories/health-benefit-packages-a-visual-summary>). For example, only 28% of responding countries include essential services for effective cancer and palliative care.<sup>9</sup>

To accelerate the prevention and control of NCDs and mental health, health promotion and NCD and mental health prevention and management interventions should be included into national HBPs. A HBP is a policy tool that defines an explicit package of health services, including multisectoral interventions, and that is made available to the population fully or partially funded from public revenues.<sup>10</sup> It defines which services are covered, who is covered, where the services can be obtained and the conditions for receiving these, and the financing mechanisms. The design of benefit policies has implications in terms of equity in the use of services and financial protection since it defines what services are excluded, and the level of co-payments for partially funded services.

Benefit package design involves several steps from the preparatory phase, deciding on the services to be evaluated and the decision criteria for prioritization, the collection of the evidence on the decision criteria for each service (the assessment), deliberating on the evidence (the appraisal) and formulating recommendations, to decision-making, and implementing the HBP.<sup>11</sup> An evidence-informed, transparent, participatory, and inclusive decision-making process with clearly defined criteria based on national values is fundamental to the prioritization and inclusion of NCD and mental health services in HBPs.<sup>12</sup> A recent technical working group at WHO identified several strategic entry points that can facilitate the adequate inclusion of NCD and mental health interventions in the different steps of the HBP revision process.

First, throughout the preparation phase, conduct strategic advocacy and secure political commitment from senior leaders in the Ministry of Health, Ministry of Finance, and other government officials at national and subnational levels for inclusion of NCDs in the HBP by highlighting the burden of NCDs, the gaps in service availability and the health and economic benefits of NCD and mental health prevention and control. This also consists of addressing misconceptions that NCD and mental health services are expensive and not cost-effective.

Second, ensure participation and meaningful engagement of NCD stakeholders, including people living with NCDs throughout the HBP revision process. This includes adequate representation of NCD stakeholders in the HBP governance structures. This should take place in the preparatory phase when the national advisory committee and technical working group(s) are set, as well as during the appraisal and decision phase of the HBP when stakeholders discuss and deliberate on the data and the evidence and formulate preliminary recommendations.

Third, use a systematic approach to identify and prioritize relevant NCD interventions. The WHO Consultative Group on Equity and Universal Health Coverage recommends three major criteria for priority

setting, namely: cost-effectiveness (giving priority to cost-effective interventions), equity (priority to interventions benefiting the worse-off), and financial risk protection (priority to interventions that increase financial risk protection).<sup>13</sup> Cost-effectiveness is the most often used criteria and establishes whether interventions provide value for money, but should be complemented with a comprehensive costing, budget impact, and fiscal space analysis. The priority list of NCD interventions can be built on existing global resources such as the WHO menu of recommended and cost-effective NCD and mental health interventions (Box 1), the UHC Compendium, and the Disease Control Priorities, 3<sup>rd</sup> Edition.<sup>14</sup>

**Box 1 WHO menu of cost-effectiveness and recommended interventions for NCDs and mental health**

The WHO recently updated appendix 3 of the global action plan for the prevention of NCDs that contains a menu of policy options and cost-effective interventions for the prevention and control of major NCDs.<sup>15</sup> The updated list of interventions, endorsed by the World Health Assembly in 2023, contains 58 interventions with 28 interventions considered to be the most cost-effective and feasible for implementation (the “Best Buys”). Many of these interventions are population-level interventions focusing on prevention, however good value-for-money treatment interventions are available for diseases. Notable progress has been made over the past two decades to generate global economic evidence for priority mental health, neurological and substance use conditions and interventions. The evidence demonstrates the efficacy, cost-effectiveness, affordability, and feasibility of interventions for countries at different income levels with regard to alcohol use (as a risk factor for disease), epilepsy, depression, anxiety disorders, bipolar disorder and psychosis.<sup>16</sup> More recent analyses have been conducted for pesticide bans as a means towards reducing suicide, and school-based social and emotional learning programmes as a means of reducing the incidence of anxiety, depression and suicidal behaviors. Available evidence has been set out in a dedicated Volume of the third edition of Disease Control Priorities and a WHO ‘menu’ of cost-effective interventions for mental health.<sup>17</sup>

Fourth, ensure that the NCD and mental health priorities in the approved HBP are translated into entitlements by ensuring adequate financing for their implementation, but also institutional arrangements securing alignment with the UHC objectives.<sup>10</sup>

Finally, we stress that HBPs should be dynamic documents. Conditions change, as does burden of disease. Institutionalization and uptake of the HBP also involve re-analysis of its contents (including re-costing). Additionally, HBPs need to be harmonized with other policy documents produced by the ministry, such as medicines formularies and standard treatment guidelines. Unfortunately, many ministries have a “siloe” structure, and coordination is not automatic. Revising HBPs with NCDs and mental health in mind could be an opportunity to improve policy coordination. Additionally, it is important to recognize that not all countries are currently able to engage into the systemic and sequential process of establishing an HBP. Lighter approaches to setting priorities, like the updating of the essential drug list, may be more adapted to those countries; what matters is to identify priority setting instruments and processes (e.g., mobilization around the primary healthcare agenda) which can strengthen the delivery of cost-effective NCD and mental health interventions in the country.

Although there is broad consensus on the sorts of NCD and mental health interventions that are essential and should be included in HBPs, governments face extraordinary pressure to expand HBPs far beyond these essential interventions to include high-cost interventions. Oftentimes, these high-cost interventions are especially in demand among enrollees of SHI schemes and civil servants, with greater access to specialized services. The political economy dynamics play in favor of interventions benefiting well-identified patients already handled by those treated in high-end health care facilities and against interventions which would benefit those still unaware of their risk factors or conditions. Box 2 reflects on how to navigate high-cost interventions in HBP processes, using the example of chronic dialysis.

**Box 2 Including high-cost interventions in HBPs: the case of dialysis**

Chronic kidney disease is an increasing problem in LICs and MICs that is being driven by many of the same risk factors as other NCDs, including increased prevalence of hypertension and diabetes. Many healthcare systems are instituting renal replacement therapy programmes to meet this growing need. Chronic hemodialysis and chronic peritoneal dialysis are the two most frequent renal replacement therapy modalities and are especially important when access to renal transplantation is limited or a patient is deemed ineligible for transplantation.

Chronic dialysis is expensive, not very cost-effective,<sup>18</sup> and places considerable demand on hospitals and healthcare systems. Yet it is a life-extending intervention that is increasingly valued by patients and specialized physicians in LICs and MICs. These groups have successfully lobbied for dialysis to be included in HBPs in several countries. A notable example is Thailand, where the decision was made to cover dialysis under its UHC schemes despite local health technology assessments that found that dialysis would not be cost-effective.<sup>19</sup> Yet it is important to acknowledge that, since dialysis is so costly, public finance of dialysis has important financial protection benefits for patients beyond its health benefits. A HBP design process that adequately balances financial protection (and other considerations) against cost-effectiveness might, in many instances, determine to include dialysis in the HBP. The challenge then becomes how to get the most value out of dialysis programmes and minimize the adverse impact on the health budget.

Principles from medical ethics and economics can inform these choices. For example, clinical eligibility criteria can be developed to identify the subset individuals who are likely to have the greatest lifetime health gains from dialysis, including younger persons and those with fewer comorbidities. When the number of persons with a similar prognosis exceeds the number of dialysis slots available, the fairness principle suggests that treatment should be allocated through random selection, rather than a first-come, first-served approach or based on capacity to pay. Rationing frameworks developed for solid organ transplant programmes might be extended to persons needing dialysis. Additionally, health technology assessment approaches can be used to identify delivery models (e.g., home-based) and modalities (e.g., peritoneal) that can be more cost-effective in the local context. Dialysis policies benefit from having explicit budgetary constraints to ensure that their financing is sustainable and does not

crowd out spending on essential health services. It is also critical that these policies have transparent eligibility criteria and accountability mechanisms, especially if part of the services are contracted to specialized private providers. Finally, to control the growth rate in spending on costly tertiary interventions like dialysis, more needs to be done to care for the health problems and risk factors like hypertension and diabetes that, left unaddressed, would increase demand.

## Section 5: Implementing priority NCD and mental health interventions: financing implications

### *How much do essential NCD and mental health interventions cost?*

Since the first High-Level Meeting on NCDs, the number of studies reporting costs and NCD and mental health interventions in LICs and MICs has increased considerably. Some of these studies have aggregated interventions into packages, which gives a general sense for the health budget required to finance personal health services, the costliest dimension of NCD and mental health financing (see Figure 1).

**Table 1** Illustrative costs of NCD packages by country income group.

Risk factor or disease area	Low-income countries	Lower-middle-income countries	Upper-middle-income countries
Tobacco use	0.15	0.83	1.6
Harmful use of alcohol	0.06	0.17	0.52
Unhealthy diet	0.13	0.21	0.43
Physical inactivity	0.079	0.31	0.94
Cardiovascular diseases	6.2	2.6	7.0
Diabetes	1.0	3.6	6.4
Chronic Respiratory Diseases	0.2	0.49	1.3
Cancer	0.6	1.6	4.1
<b>Total cost</b>	<b>8.5</b>	<b>9.8</b>	<b>22</b>

Note: cost estimates are annual economic costs per capita and are in Int\$. Source: WHO.<sup>15</sup>

**Table 2** Illustrative costs of mental health packages by country income group.

Disease area	Low- and lower-middle-income countries	Upper-middle and high-income countries
Population-based interventions (80% coverage)	0.10	0.60
Psychosis (80% coverage)	1.6	12
Bipolar disorder (50% coverage)	1.6	12
Depression (50% coverage)	1.5	4.7

<b>Total cost</b>	<b>4.8</b>	<b>29</b>
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Note: cost estimates are annual economic costs per capita and are in Int\$. Source: WHO.<sup>17</sup>

Roughly speaking, the cost of an essential NCD package (aligned with appendix 3 recommendations) would cost around 0.1% of GDP for the average middle-income country, perhaps up to 0.4% of GDP for the average low-income country. For mental health, this would be approximately 0.1% and 0.2% respectively.

### *Linking NCD and mental health interventions to financing and budgeting*

[NB: section under development; will try to link to country case studies when possible]

A recent review of country experiences with HBP reform revealed that few, if any, of these HBPs were designed with financing systems and purchasing arrangements in mind.<sup>20</sup> In many cases, they were developed without taking into account the limits of the health budget. The contents of HBPs generally reflected aspiration rather than reality. Put another way, HBPs often serve as an agenda-setting, advocacy, or fund-raising tool, rather than as a tool for prioritizing resources. It is then unsurprising that the “translation” of specific HBP interventions (e.g., treatment of breast cancer) into costed actions (e.g., reimbursement of oncologists, purchasing and distribution of chemotherapeutics, etc.) is often lacking.

The disconnect between priority-setting (imperfect as it may be) and implementation is a major barrier to effective financing of NCD and mental health interventions that was reiterated in our desk review of policies and interviews. We conclude that HBP listing is a necessary but not sufficient step in ensuring access and financial protection. Departments and agencies that are “downstream” of the HBP process require more specific information than they are currently receiving on the contents of the HBP and how those translate into changes in inputs (e.g., medicines) and reimbursement for episodes of care. As Figure 1 shows, these actions are all situated within the PFM ecosystem, so if that system is not set up for strategic purchasing, the contents of the HBP will be very difficult to implement. In at least one country case study, failure to engage the ministry of finance early in the HBP process was viewed as a barrier to implementation.

In some cases, the first step is to make these departments aware that the HBP exists. Countries like Colombia that have better HBP implementation have tended to align their HBPs with purchasing arrangements. For example, rather than simply listing “hypertension treatment” in the HBP, the HBP includes a medicines formulary that lists which medications (e.g., amlodipine) are covered for which clinical indications (e.g., I10, I119, etc.). Of course, implementing this sort of arrangement presupposes a good health information system, and many lower-resource countries will require external support to build modern data systems capable of doing strategic purchasing well.

### *Pooling: fragmentation and its impacts on management of NCD and mental health*

Many LMICs are actively reforming their health financing systems to progress towards UHC. Adopting an NCD and mental health lens can reveal some specific points of attention.

Some health financing reforms can indeed go against the NCD and mental health agenda. For instance, contributory-based entitlement systems (e.g., social health insurance) may be particularly problematic for people living with a chronic condition. Indeed, because of their poor health condition, some will not hold a secured employment; because of the incompleteness of welfare schemes or safety nets (e.g., absence of a sickness or invalidity fund), they will be unable to pay their contribution to the insurance. Because of their ill-health (or an economic downturn), some may also lose their formal employment and thus lose their health coverage which may have tremendous consequence of the continuity of their treatment.<sup>21</sup> One strategy is to establish explicit service guarantees for the population for some services or medicines.

Social health insurance agencies also tend to focus on their core mission: to ensure financial access to curative interventions and protect insured persons against catastrophic health care expenditure. Along this mandate, they may consider that prevention is not their business, and indeed in some countries, they may even be forbidden to engage into prevention. Yet, there is both a public health and economic rationale for an insurance to engage into tertiary, secondary and even primary prevention. The rise of NCDs should encourage countries to reconsider some of the delineations that have been in terms of mandate. Recent policy reforms in Colombia, for instance, have included mandates (and resources) for insurers to engage more in population health management and prevention programmes.

### *The role of provider payment in implementing NCD and mental health interventions*

Effective financing for NCD and mental health interventions also requires effective provider payments systems. Much has been written about best practices in this area. Here, we make a few points that are especially relevant to NCD and mental health conditions and their complications.

A general guidance is to embed any reform action into an understanding of required broader systemic changes. In many LICs and some MICs, the service delivery has not yet been adapted to handle the epidemiological transition. Preventive interventions and appropriate models of care have still to be rolled out or even identified. Cascade analyses of NCD built on STEP surveys will allow to identify the shortcomings of the health service delivery system, and for instance, reveal the importance to invest in primary care facilities to improve screening.<sup>22</sup> Health seeking behavior surveys will also be insightful and reveal for instance that a non-negligible share of NCD patients seek care from private health care providers or transition from public to private providers along their journey.<sup>23</sup> This reminds us that health financing arrangements must regulate the performance and outcomes of the health sector as a whole, also by encouraging coordination and continuity of care.

Another general rule is that provider payment systems need to be designed to minimize the risk of shifting costs to patients. This is especially true of medicines. The default arrangement in public facilities in many countries is that providers are underpaid, and/or medicines supply is insufficient to meet demand, so



patients need to purchase medicines from private retail pharmacies themselves. Of course, this leads to greater out-of-pocket costs and greater financial risks (see separate background paper). Countries need to take steps to ensure that payments are adequate to cover the full cost of service provision, including medications. (Practically, this might come down to re-costing the interventions in the HBP [see above] and revising reimbursement rates.) Or if medications are reimbursed separately from provider payments, the arrangement should cover all the medicines on the HBP formulary, with clear reimbursement rate, ideally through an e-prescription system ensuring that the subsidy is directly charged to the pooled fund.

The first expectation upon health financing arrangements should be to secure the funding of the inputs required to produce services. In countries where the public financial management system still rests upon line-item budgeting, this can already consist in increasing the budget line for salaries (e.g., to expand the number of mental health nurses in primary care facilities) or for consumables (e.g., for the central medical store to purchase diagnostic tests for diabetes).<sup>24</sup> But this will rarely be sufficient for ensuring high-quality chronic care and it is worthwhile to consider what various payment models can offer.

As a rule, any undertaking in this direction should be aligned with broader efforts to build a performing health financing system, in full cognizance of the context. A recent Lancet Global Health Commission on financing for primary health care has recommended a blended payment for primary care, with capitation at the core.<sup>25</sup> For chronic patients, capitation with empanelment is an even more promising arrangement (as the registration establishes a long-term relationship between the person living the chronic condition and the provider and incentivize the latter to empower the former in the management of her condition), though this requires well-functioning civil registration and health information systems. Pay-for-performance models are also tracks to consider to enhance the quality of care.<sup>26</sup>

For inpatient services, which are an important complement to outpatient chronic care, experts recommend payments based on volume and type of services delivered, including paying for quality and adjusting payments for case mix severity. Payment based on diagnosis-related groups is the system in place in many high-income countries, though it also requires a well-functioning health information system and can take years to develop, pilot, and optimize. Several countries, including middle-income ones, are testing the feasibility of *bundled payment*, which consists in grouping together several components of health care delivered by several providers for a specific intervention and paying for the whole “bundle” together, e.g., across disciplines and care levels. Bundled payments incentivize the integration of care and patient-centered collaboration and coordination across providers, all matters of central importance for quality chronic care. Capitation for outpatients and diagnosis-related groups for inpatients are only effective models when they are coordinated. How to do this well should be a priority for health financing research.

Purchasing NCD and mental health interventions needs to include consideration of the mechanisms that ensure adequate access to care, and their attendant costs. For example, teleconsultation can greatly expand access to primary and specialized care and promote continuity, but there needs to be parity in reimbursement to ensure providers are incentivized to provide teleconsultation. As another example, community health workers can be critical in scaling up health education and screening for common NCD and mental health conditions, but they need to be paid fairly for their work, and the costs of key inputs

(e.g., point-of-care diagnostics) need to be covered.<sup>27</sup> As another example, socio-economically vulnerable populations may need incentives or financial support to promote health-seeking behaviors. The cost of transportation to and from health facilities is a major barrier in many countries, and mechanisms like vouchers or cash transfers (or, at a minimum, reimbursement for transportation costs) may need to be considered.

All these measures should be aligned with building an integrated health care system, including by finding synergies with the introduction of an electronic health record system allowing the follow-up of any multi-morbidity, the delivery of an interdisciplinary support and the navigation between levels of care inherent to NCD and mental health. Leveraging purchasing arrangements for performing chronic care require capable purchasing agencies. In many LMICs, analytical capacities of purchasing agencies must still be strengthened: too many of them fail to exploit the wealth of data generated by payment systems (and even more, data from other sources), which could be so useful to improve quality of care (e.g., analysis of prescriptions, success in incentivizing providers to invest in preventive measures).

### *Sustaining financing for NCD & mental health care in the face of demographic and epidemiological change*

The burden of NCD and mental health conditions, and thus demand for interventions, is projected to continue growing in all countries despite our best efforts to prevent these conditions. This is because population growth and aging will be major drivers of increasing caseloads, and in most instances these two factors will outweigh reductions in age-specific incidence and mortality rates. Ministries of Finance and health need to be prepared to devote increasing resources to NCD and mental health care.

Sustaining financing for these interventions over time starts by defining the objective, which is to ensure that all individuals who need these services have access without undue financial hardship. Because of the expected growth rate in NCD and mental health needs, this means prospectively budgeting for increased coverage (share of the population) and increased need (number of individuals, i.e., due to population growth and aging). Use of historical budget data to prepare future budgets guarantees that these NCD and mental health activities will be under-resourced. Second, progress will be compromised if policymakers do not take full advantage of preventive interventions that can reduce future demand for costly healthcare. This includes not only medical interventions in primary healthcare but intersectoral actions to reduce risk factors (e.g., tobacco, alcohol, and air pollution). Third, implementing modern, unified patient data systems for provider payment can allow planners to identify NCD and mental health conditions that are driving healthcare costs and use this information to tailor prevention efforts as well as case management strategies. Fourth, mechanisms need to be put in place to control “unproductive cost escalation,” i.e., the upward pressure on costs that occurs with economic growth and adoption of new health technologies. The Lancet Commission on Investing in Health recommended several policy actions to prevent this sort of cost escalation.<sup>28</sup>

One area of increasing concern for financing systems is long-term care. Need for long-term care services is expected to grow more rapidly than need for healthcare overall, and long-term care services tend to be human resource-intensive, which drives up their costs at the rate of health worker salary growth (which usually exceeds productivity growth). Box 3 summarizes some of the key issues in long-term care in LICs and MICs.

**Box 3 Sustainable long-term care systems for persons affected by NCD and mental health conditions.**

A subset of persons affected by NCD and mental health conditions suffer from long-term or permanent disability that is so severe there is limited scope for functional reintegration into the community. Examples include persons who have experienced severe strokes with residual deficits, those with profound intellectual disabilities, severe dementia and some refractory cases of psychosis. In each of these cases, what is needed is ‘custodial’ care – i.e., people to look after the affected person and provide humane, symptom-based care for their remaining years. Historically these individuals were institutionalized in hospitals (and sometimes prisons), but now the emphasis is on community-based care.

While de-institutionalization makes sense from a dignity, human rights and social inclusion perspective, it can have the adverse effect of shifting the costs of custodial care from the state to households. (Of course, in many lower-income countries, there is no significant state involvement, and the default has always been household-based care.) The economic consequences are considerable. For example, a study from Mexico found that an “inclusive” notion of national health accounts— which incorporated the economic value of informal caregiving—would increase health spending as a share of GDP by 19% compared to official statistics.<sup>27</sup> Most (70%) of this care is provided by women and girls, limiting their economic opportunities outside the home.

These figures are snapshots that do not account for current unmet need or future need. The latter is consequential in countries that are aging rapidly, such as China. One study projected that the cost of home- and community-based long-term care services in China would increase from 0.7% of GDP in 2020 to 6% of GDP in 2050.<sup>29</sup>

Whether the State should take over this caregiving role is an unsettled question. In many cultures, elder care is seen as the responsibility of the family rather than the state. What has changed in recent years is the pace of population aging and the sheer number of older adults and persons with permanent disability who require long-term care. Many governments are simply unprepared for these changes, including many with formal social protection systems. In the same study from Mexico, the authors found that incorporating income transfers for long-term care from the main social security institutions would add another 9.2% to the “health” budget.<sup>27</sup> Thus Mexico is estimated to “spend” closer to 7.3% of GDP on healthcare, compared to the official statistic of 5.7% of GDP. Put another way, 20-25% of the output of Mexico’s health sector (defined inclusively) is for providing social care and long-term care services. These findings suggest that the health and social protection systems in countries like Mexico and China

will face enormous pressure in the coming decades to expand long-term care services as populations age and the working-age population share decreases.

The Kobe Centre for Health Development has prepared a series of policy briefs summarizing best practices in financing long-term care services. One brief outlines the tradeoffs between universal (i.e., equal access for all), selective (i.e., targeting towards those in greatest need), and mixed approaches to coverage.<sup>30</sup> MICs that have instituted long-term care policies have tended to favor mixed approaches, with a vision of expanding towards universal approaches. Another brief reviews how countries tend to finance long-term care.<sup>31</sup> While some HICs finance long-term care in part through compulsory insurance (mostly payroll taxes), this can be problematic, and MICs and LICs with a larger informal sector will almost certainly need to rely more on general taxation to ensure stable and adequate funding. Decentralized systems also require central regulation and support to prevent inequities. Another brief explores how to design a benefits package for long-term care services.<sup>26</sup> Development of these packages usually starts with an understanding of the funding available and what types of needs (and intensity of needs) can reasonably be addressed using public resources. Administering these benefits requires relatively advanced bureaucratic capacity that can determine eligibility and need for individual patients dynamically and can coordinate with the social protection sector.

Finally, it is important to note that all countries with formal long-term care systems, including HICs with advanced healthcare systems, struggle to maintain sustainable financing and long-term care workforce. The fourth industrial revolution and increasing role of artificial intelligence in healthcare are creating new opportunities—and risks—for meeting the needs of aging populations. We argue that, at least for MICs and LICs, there is a clear role for DAH (broadly defined) to support innovations in long-term care delivery systems and social care policies, with an emphasis on cross-country learning.

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